

PATENT
Attorney Docket No. 224.303
Express Mail Label No. EV249896433US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)
Donald D. Reitz)
Serial No.)
Filed: Concurrently Herewith)
For: Gas Recovery Apparatus, Method)
and Cycle having a Three Chamber)
Evacuation Phase and Two Liquid)
Extraction Phases for Improved)
Natural Gas Production)

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The Examiner may wish to consider the following references during the examination of the above-identified application:

<u>Patent Number</u>	<u>Publication Date</u>	<u>Country</u>
1,853,296	April 12, 1932	United States
2,016,433	Oct. 8, 1935	United States
2,142,773	Jan. 3, 1939	United States
2,698,581	Jan. 4, 1955	United States
3,090,316	May 21, 1963	United States
3,884,299	May 20, 1975	United States
3,894,583	July 15, 1975	United States
3,941,510	March 2, 1976	United States
3,991,825	Nov. 16, 1976	United States

<u>Patent Number</u>	<u>Publication Date</u>	<u>Country</u>
4,502,843	March 5, 1985	United States
4,509,599	April 9, 1985	United States
4,527,633	July 9, 1985	United States
4,653,989	March 31, 1987	United States
4,708,595	Nov. 24, 1987	United States
4,711,306	Dec. 8, 1987	United States
4,741,673	May 3, 1988	United States
4,768,595	Sept. 6, 1988	United States
4,844,156	July 4, 1989	United States
4,923,372	May 8, 1990	United States
5,006,046	April 9, 1991	United States
5,069,285	Dec. 3, 1991	United States
5,211,242	May 18, 1993	United States
5,374,163	Dec. 20, 1994	United States
5,407,010	April 18, 1995	United States
5,417,281	May 23, 1995	United States
5,431,222	July 11, 1995	United States
5,488,993	Feb. 6, 1996	United States
5,522,463	June 4, 1996	United States
5,544,706	Aug. 13, 1996	United States
5,611,397	March 18, 1997	United States
5,611,671	March 18, 1997	United States
5,655,605	Aug. 12, 1997	United States
5,671,813	Sept. 30, 1997	United States
5,911,278	June 15, 1999	United States
570697	Aug. 1997	Russia

Other Documents

Kermit Brown, *The Technology of Artificial Life Methods*, Vol 2, pp. 125-131, 1977.

E.E. DeMoss, *4 New Ways to Reduce Artificial Lift Expense*, World Oil, pp. 63 and 64, May 1973

H.W. Winkler et al., *Down-Hole Chambers Increase Gas-Lift Efficiency*, The Petroleum Engineer, part 1 - June 1956; part 2 - Aug. 1956

H.W. Winkler et al., *Chamber Design*, CAMCO Gas Lift Manual, Chapter VII, pp. 7-001 - 7-015, 1962

John T. Dewan, et al., *Lifting of Heavy Oil with Inert-Gas-Operated Chamber Pumps*, SPE 9913, pp. 277-285 plus illustrations.

Steve B. Coleman et al., *A New Look at Predicting Gas-Well Load-Up*, JPT, March, 1991

Steve B. Coleman et al., *Understanding Gas-Well, Load-Up Behavior*, JPT, March, 1991

E.E. DeMoss et al., *Liquid Removal from Gas Wells – Gas Lifting with Reservoir Gas*, April 1968

Attached is a completed Form PTO-1449 for the Examiner's convenience in citing these references. Copies of the above identified references are also enclosed.

Signed at Greenwood Village, Colorado this 3rd day of November, 2003.

Respectfully submitted,



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FORM PTO-1449 (R v. 2-82)		U.S. DEPART. OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 224.303	SERIAL NO.
		INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT Donald D. R itz	
		(Use several sheets if necessary)		FILING DATE Concurrently Herewith	GROUP

U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER							DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPRO- PRIATE
		1	8	5	3	2	6	9					
		1	8	5	3	2	6	9	04/12/32	Harris			
		2	0	1	6	4	3	3	10/08/35	Humason			
		2	1	4	2	7	7	3	01/03/39	Athey			
		2	6	9	8	5	8	1	01/04/55	Maier			
		3	0	9	0	3	1	6	05/21/63	Montgomery			
		3	8	8	4	2	9	9	05/20/75	McCarter et al.			
		3	8	9	4	5	8	3	07/15/75	Morgan			
		3	9	4	1	5	1	0	03/02/76	Morgan			
		3	9	9	1	8	2	5	11/16/76	Morgan			
		4	5	0	2	8	4	3	03/05/85	Martin			
		4	5	0	9	5	9	9	04/09/85	Chenoweth et al.			
		4	5	2	7	6	3	3	07/09/85	McLaughlin et al.			
		4	6	5	3	9	8	9	03/31/87	Mason			
		4	7	0	8	5	9	5	11/24/87	Maloney et al.			
		4	7	1	1	3	0	6	12/08/87	Bobo			
		4	7	4	1	6	7	3	05/03/88	Jubb			
		4	7	6	8	5	9	5	09/06/88	Smith			
		4	8	4	4	1	5	6	07/04/89	Hershberger			
		4	9	2	3	3	7	2	05/08/90	Ferguson et al.			
		5	0	0	6	0	4	6	04/09/91	Buckman et al.			
		5	0	6	9	2	8	5	12/03/91	Nuckols			
		5	2	1	1	2	4	2	05/18/93	Coleman et al.			
		5	3	7	4	1	6	3	12/20/94	Jaikaran			
		5	4	0	7	0	1	0	04/18/95	Hers			
		5	4	1	7	2	8	1	05/23/95	Wood et al.			
		5	4	3	1	2	2	2	07/11/95	Bustamante			
		5	4	8	8	9	9	3	02/06/96	Hershberger			
		5	5	2	2	4	6	3	06/04/96	Barbee			

FORM PTO-1449 (Rev. 2-82)		U.S. DEPART. OF COMMERCE PATENT AND TRADEMARK OFFICE							ATTY. DOCKET NO. 224.303		SERIAL NO.	
		INFORMATION DISCLOSURE STATEMENT BY APPLICANT							APPLICANT Donald D. Reitz			
		(Use several sheets if necessary)							FILING DATE Concurrently Herewith		GROUP	
		5	5	4	4	7	0	6	08/13/96	Reed		
		5	6	1	1	3	9	7	03/18/97	Wood		
		5	6	1	1	6	7	1	03/18/97	Tripp, Jr.		
		5	6	5	5	6	0	5	08/12/97	Matthews		
		5	6	7	1	8	1	3	09/30/97	Lima		
		5	9	1	1	2	7	8	06/15/99	Reitz		

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION	
		5	7	0	6	9	7						YES	NO
									08/77	Russia				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

			Kermit Brown, <i>The Technology of Artificial Life Methods</i> , Vol 2, pp. 125-131, 1977.										
			E.E. DeMoss, <i>4 New Ways to Reduce Artificial Lift Expense</i> , World Oil, pp. 63 and 64, May 1973										
			H.W. Winkler et al., <i>Down-Hole Chambers Increase Gas-Lift Efficiency</i> , The Petroleum Engineer, part 1 - June 1956; part 2 - Aug. 1956										
			H.W. Winkler et al., <i>Chamber Design</i> , CAMCO Gas Lift Manual, Chapter VII, pp. 7-001 - 7-015, 1962										
			John T. Dewan, et al., <i>Lifting of Heavy Oil with Inert-Gas-Operated Chamber Pumps</i> , SPE 9913, pp. 277-285 plus illustrations.										
			Steve B. Coleman et al., <i>A New Look at Predicting Gas-Well Load-Up</i> , JPT, March, 1991										
			Steve B. Coleman et al., <i>Understanding Gas-Well, Load-Up Behavior</i> , JPT, March, 1991										
			E.E. DeMoss et al., <i>Liquid Removal from Gas Wells - Gas Lifting with Reservoir Gas</i> , April 1968										

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant